

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 2001079011  
PUBLICATION DATE : 27-03-01

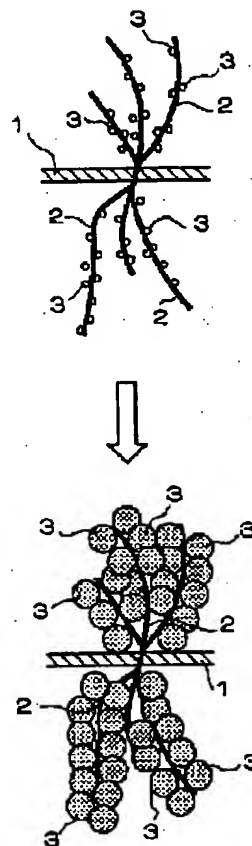
APPLICATION DATE : 14-09-99  
APPLICATION NUMBER : 11260946

APPLICANT : MEDIKIT KK;

INVENTOR : JINNO TOSHIO;

INT.CL. : A61B 17/12 A61M 29/00

TITLE : EMBOLIZATION COIL AND ITS  
MANUFACTURE



**ABSTRACT :** **PROBLEM TO BE SOLVED:** To surely embolize a blood vessel without forming thrombus by absorbing the moisture in the blood by a highly water-absorbent resin adhered to the fiber of the embolization coil, and at the same time, reduce the amount of the embolization coil used because the embolization coil itself is hard to flow away by blood stream, and in addition, facilitate the passing in a catheter with a lubricating property.

**SOLUTION:** This embolization coil is equipped with a embolization coil of a desired length, and a fiber 2, 2 and forth, which is projected from the embolization coil 1. The embolization coil 1 is detained in a blood vessel under a proper shape such as a spiral shape, a clover shape or a linear shape, in response to the previous shape by being pushed out from a catheter. The fiber 2, 2 and so forth comprises a proper raw material such as a synthetic resin, and a highly water-absorbent resin 3, 3 and so forth, which is adhered at least to the surface of the fiber. The highly water-absorbent resin 3, 3 and so forth comprises a polymer which slightly crosslinks a water-base polymer, and forms a hydro-gel by absorbing a water content of several times to several hundred times of its self-weight. In concrete, a polyacrylic acid and a salt of its copolymer or the like can be counted. Also, as the shape of the highly water-absorbent resin 3, 3 and so forth, a spherical shape, of which the diameter is approx. 50 to 500  $\mu\text{m}$ , is preferable, and the highly water-absorbent resin 3, 3 and so forth is preferably adhered to the fiber 2 with an adhesive.

COPYRIGHT: (C)2001,JPO